

# Managing Risk

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# Discussion Topics

The Markets We Live With

Managing Business Risk

Why Risk Management In Dairy

Risk Tools, Education and Tracking

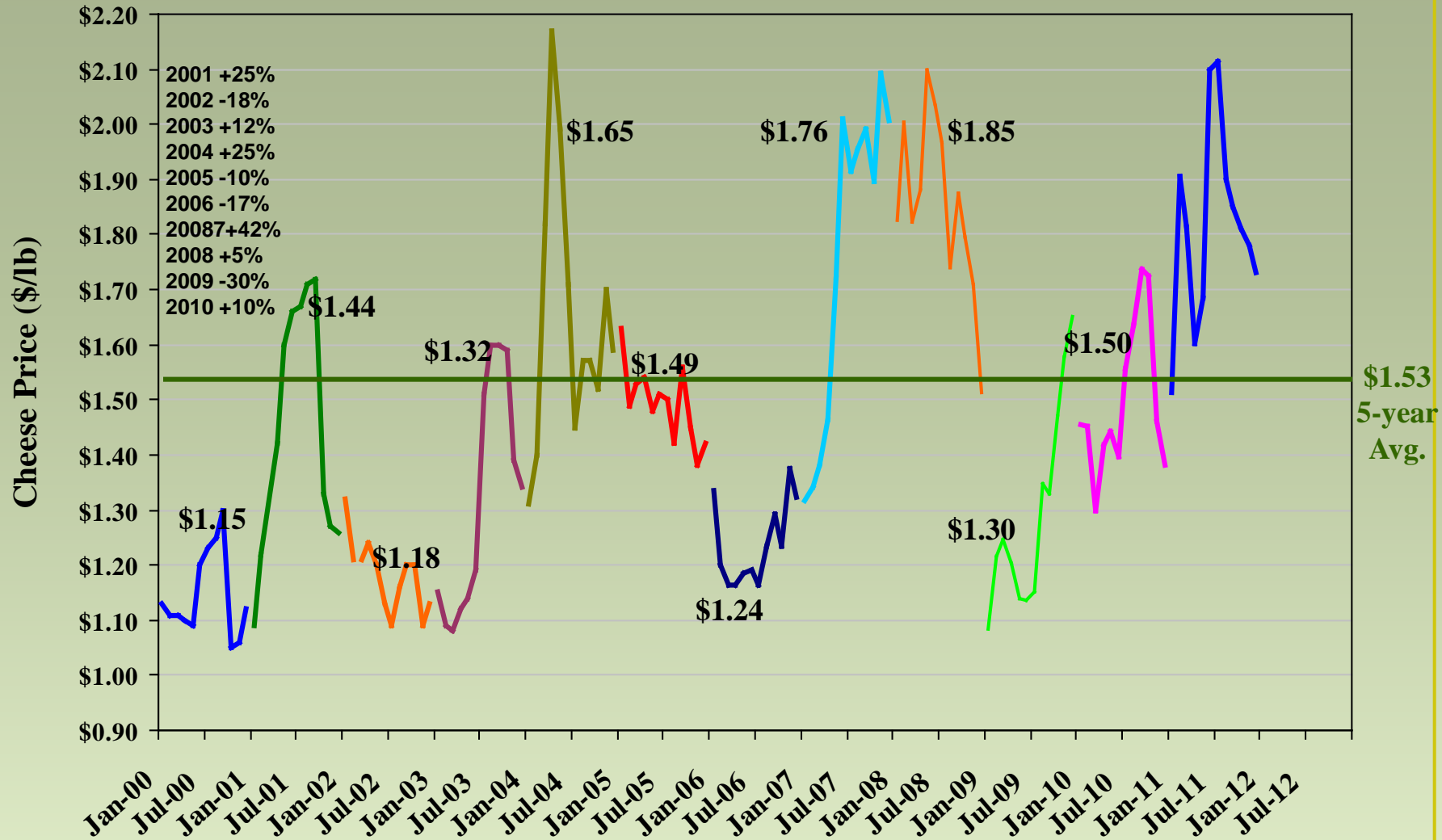
Business Trends And Risk

# The Markets we Live With!!!

- Supply Demand Fundamentals
- Review of cheese and NFDM Markets
  - Impacts to Milk Price

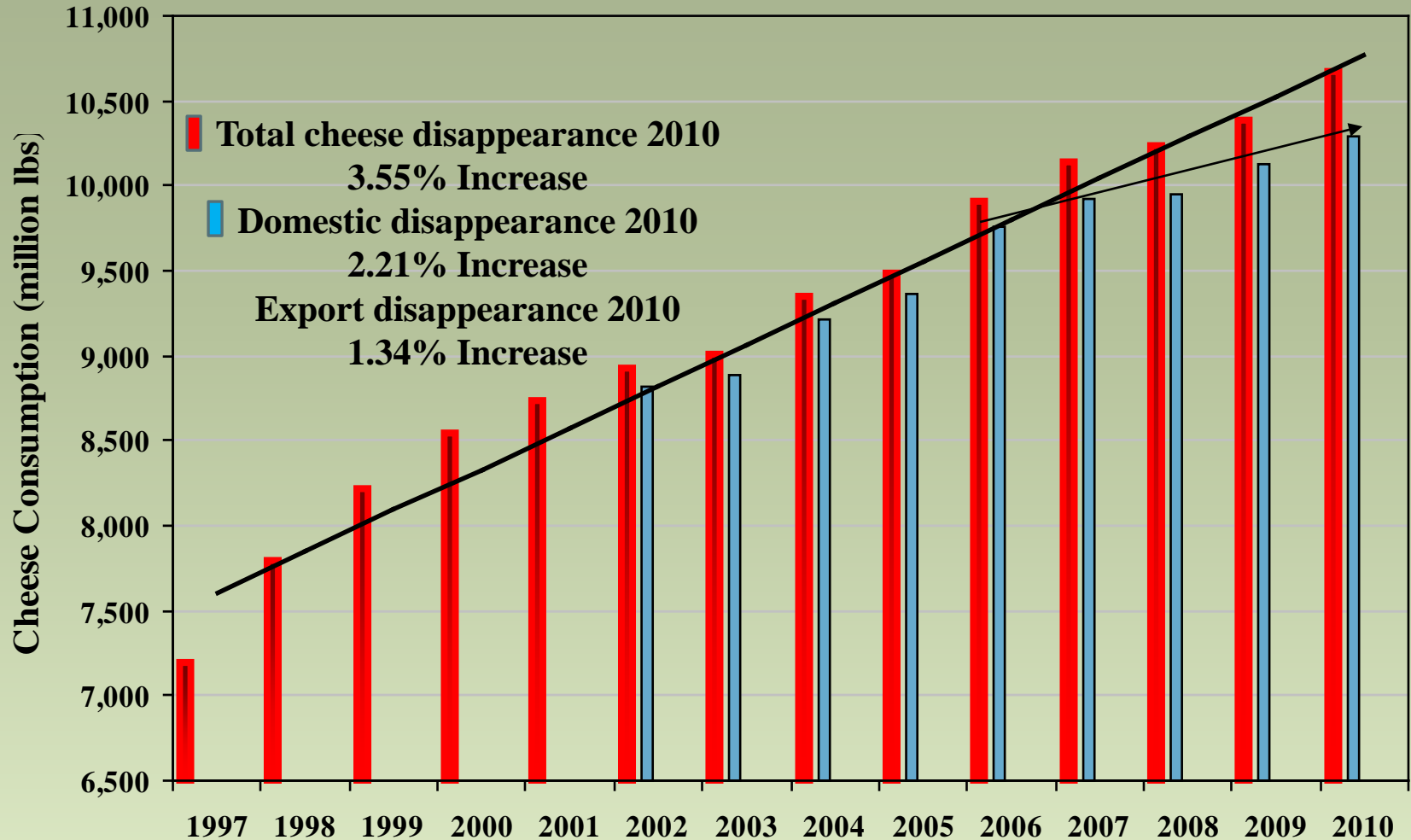
# Cheese Market reacts to Exports

## Block Cheese Price



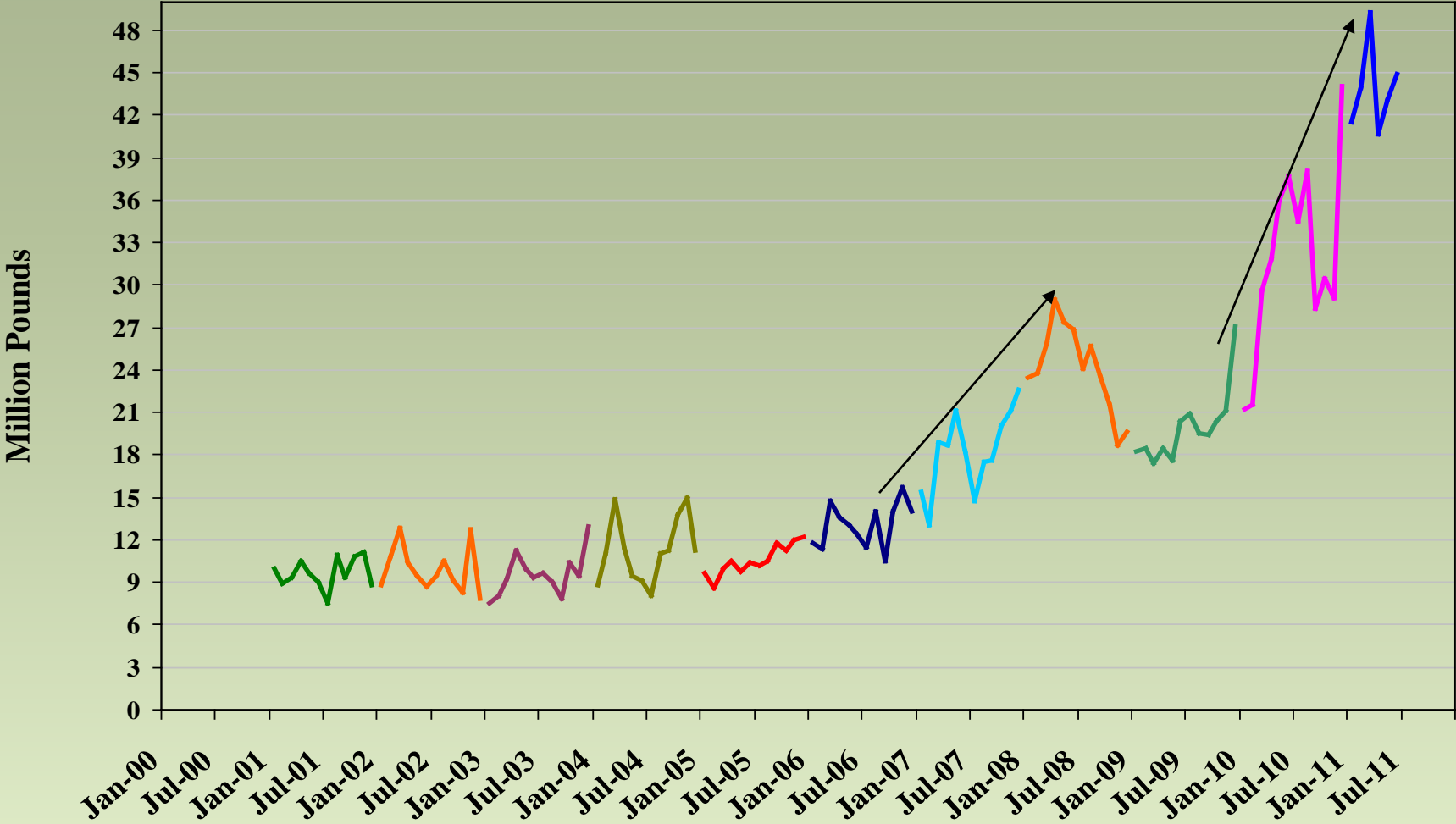
# Exports are Picking Up the Slack

Total & Domestic Cheese Consumption (USDA data)



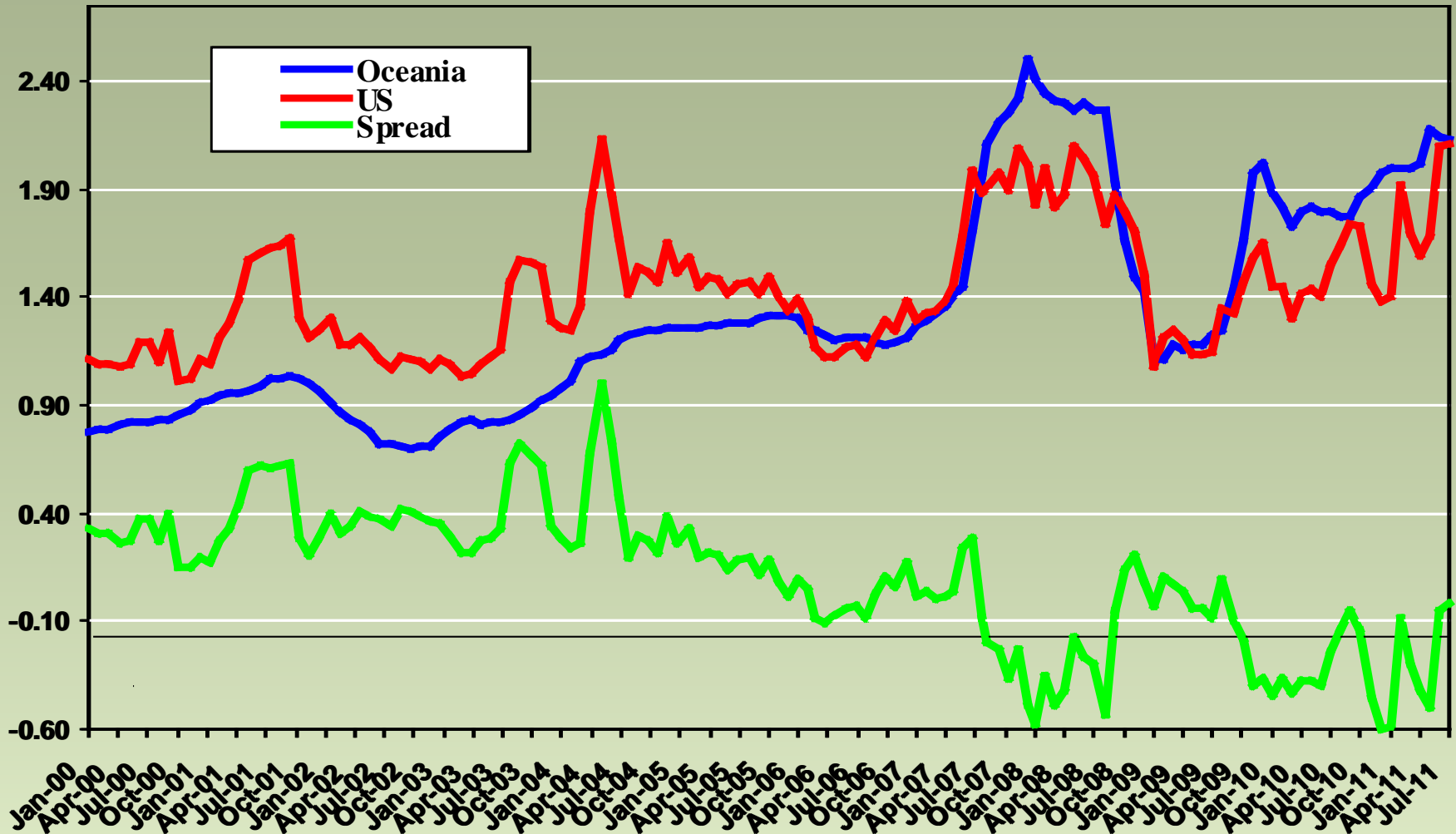
# Dairy is a Global Market

U.S. Cheese Exports (source USITC)

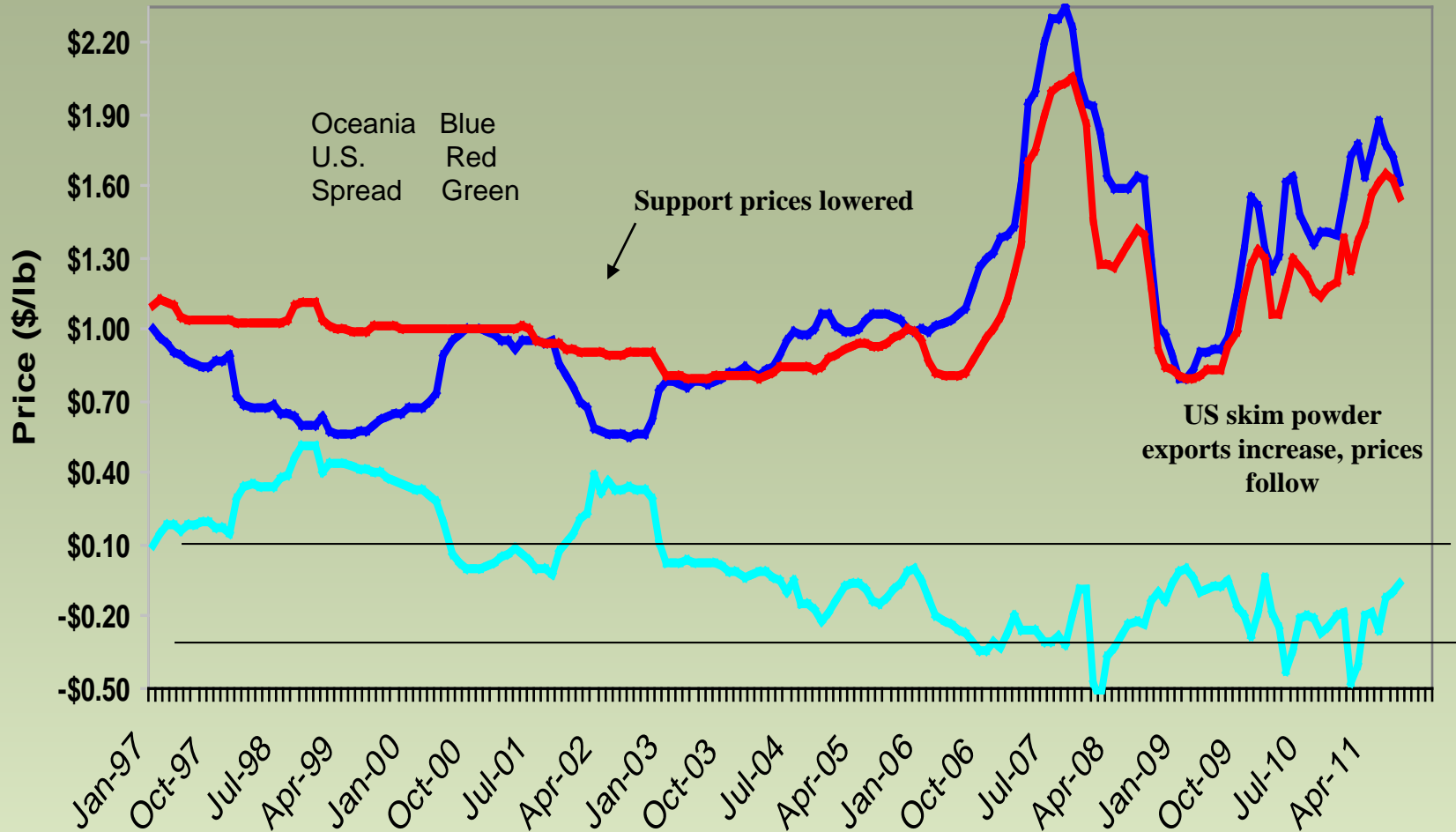


# U.S. Cheese Price Tied to World Price

Cheddar Cheese



# Does the U.S. NFDM market track the Oceania SMP market?



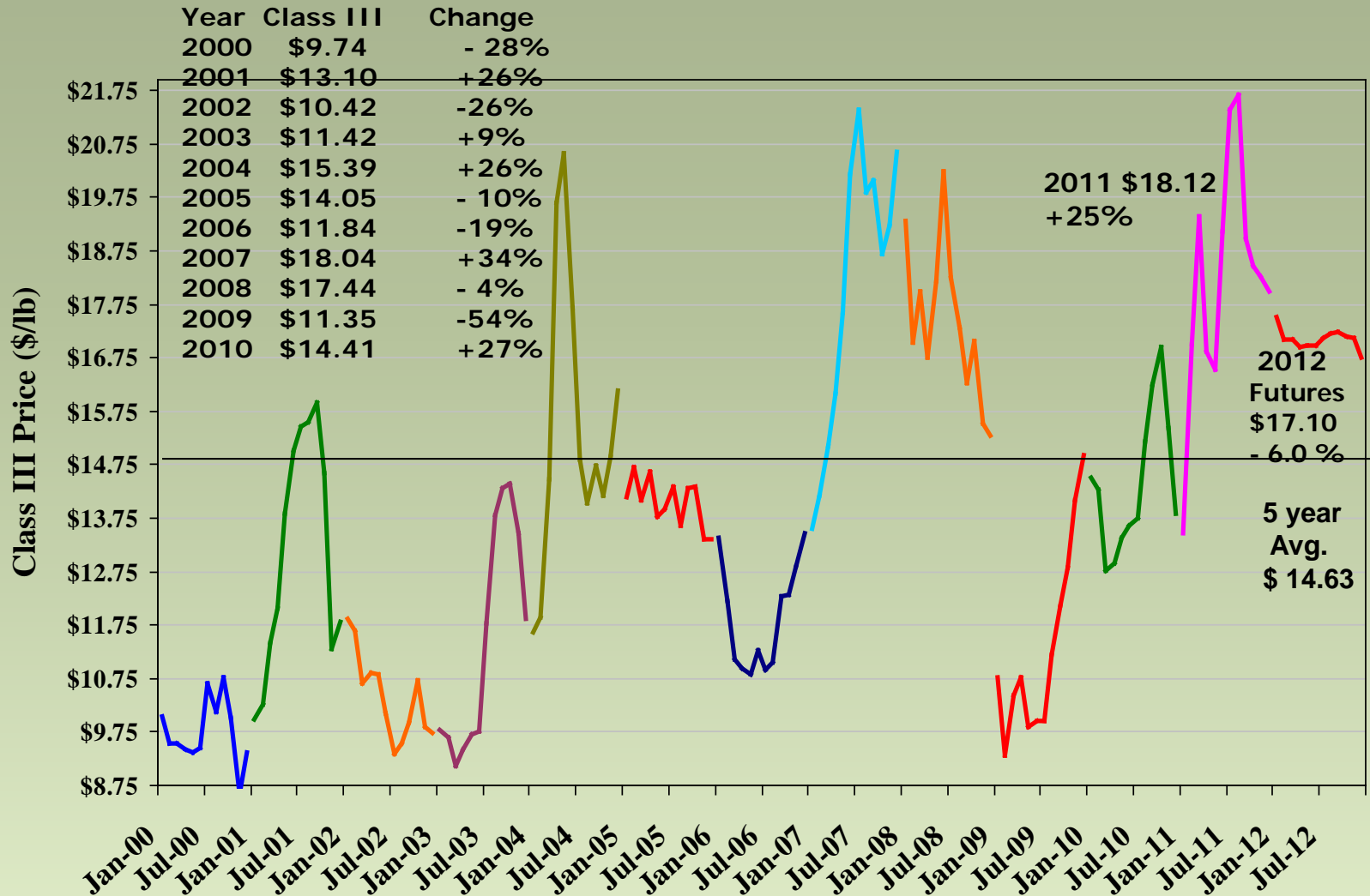


# World Dairy Situation

- The Outlook for the first half of 2012 is mixed
  - Global Dairy Trade (gDT) trading down
  - Global economic growth slowing 3.2 vs. 3.9%
  - Imports are likely to slow causing prices to moderate
  - Markets more likely unpredictable and volatile

# Price Risk is not Going Away

## Class III Price (actuals and futures)



# Managing Business Risk!!!

## A Risk Matrix

- How in the world did we get this volatility
  - What's a hedge
- Explain a potential Strategy

# Risk Management

- The cost will vary but one thing is for sure none of the risk management options will be covered easily or cheaply
- The payoff can be significant because risk can mean potential as well as peril

# Barriers to adopting Risk Management

- Apathy
- Inertia

“Doing nothing is easier than doing something”

# Catalog your risks

- Assess for:
  - Significance
  - Frequency
  - Capability to handle
    - Keep it
    - Move it

# Producer Business Risk

**Frequency of a risk event** High

## Operational Risk

Manage for performance.

- Dairy
- Heifers
- Crops

## Financial Risk

Hedge to protect margins

- Revenues
- Purchasing
- Financing

## Strategic Risk

Adjust to participate.

- Government
- Consumers
- Industry

## Catastrophic Risk

Insure to protect assets

- Fire
- Liability
- Death

Low

**Severity of a risk event** High

### Risk Category Mitigation

Strategic Risk Adjust to it

Operational Risk Manage it

Financial Risk Hedge it

Catastrophic Risk Insure it

# Member Implementation Needs

- Cost of production Information
  - Actual and forecast
- Basis Information
  - Actual and forecast
- Forecasted Production
  - Impact of a change in production per cow
- Defined Strategy
- Business Communication
- Tracking System



# Business Communication

- Agreement on Strategy
- Agreement on Implementation Plan
- On-going Market and Futures market updates
- On-going execution updates

# Tracking System

- Basis Information
  - Monthly
  - Yearly
- Offered Contracts
- Accepted Contracts
- Settled Contracts
  - Price
  - Contracted Volume
  - Type
  - Open Volume

# Defined Risk Strategy

- Risk Position of 100% open or closed ( hedged or contracted)
  - All right or all wrong
- Example Risk Strategy
  - 50% contracted 100% of the time
    - 50% correct 100% of the time
- A determined level of acceptable profit
- Plan for implementation
  - Who (In the business)
  - When (price points)
  - What ( volume)
  - How (which tools)
  - Where (Co-op, broker)

# Cost of Production Information

- Managerial Accounting
  - Feed Cost
  - Replacements
  - Labor
  - Expenses
  - Financing

# Managerial Accounting

	Cost of Goods			Cost of Milk			Variable Cost of Milk	Financing Cost			Asset Cost			Total Business Cost
	Feed	Replaces	Cost of Goods	Expenses	Labor	Mgt Draw		Interest	Principle	Cost to Cash Flow	Culling & Death Loss	Cash Funded Capital	Fixed Cost Of Milk	
	\$	\$	\$/ cwt	\$	\$	\$	\$/Cwt	\$	\$	\$/ cwt	\$	\$	\$/ cwt	\$/ cwt
January	26,199.74	7,800.00	5.54	26,727.11	18,086.44	704.52	12.97	3,469.78	9,687.21	15.11	2,656.41	7,338.06	3.21	16.74
February	23,037.15	7,800.00	5.72	23,500.86	15,903.21	619.48	13.14	3,050.94	8,517.86	15.29	2,586.01	6,452.28	3.37	17.08
March	25,225.06	7,800.00	5.59	25,732.82	17,413.59	678.31	13.02	3,340.70	9,326.83	15.16	2,557.58	7,065.07	3.21	16.79
April	24,310.96	7,800.00	5.64	24,800.31	16,782.56	653.73	13.07	3,219.64	8,988.84	15.21	2,547.07	6,809.05	3.22	16.86
May	25,092.51	7,800.00	5.60	25,597.59	17,322.08	674.75	13.02	3,323.14	9,277.81	15.17	2,544.14	7,027.94	3.21	16.80
June	24,285.55	7,800.00	5.65	24,774.39	16,765.02	653.05	13.07	3,216.27	8,979.45	15.21	2,544.40	6,801.93	3.22	16.86
July	25,110.39	7,800.00	5.60	25,615.83	17,334.43	675.23	13.02	3,325.51	9,284.43	15.17	2,545.96	7,032.95	3.21	16.80
August	25,130.51	7,800.00	5.60	25,636.36	17,348.32	675.77	13.02	3,328.18	9,291.87	15.17	2,548.00	7,038.59	3.21	16.80
September	24,340.70	7,800.00	5.64	24,830.65	16,803.09	654.53	13.07	3,223.58	8,999.84	15.21	2,550.18	6,817.38	3.22	16.86
October	25,173.61	7,800.00	5.60	25,680.32	17,378.07	676.93	13.02	3,333.88	9,307.80	15.17	2,552.37	7,050.66	3.21	16.80
November	24,381.86	7,800.00	5.64	24,872.64	16,831.50	655.64	13.06	3,229.03	9,015.06	15.21	2,554.49	6,828.90	3.22	16.85
December	25,214.77	7,800.00	5.59	25,722.32	17,406.49	678.04	13.02	3,339.34	9,323.02	15.16	2,556.54	7,062.19	3.21	16.79
<b>Cost/Cow</b>	1,182	372	1,554	1,206	816	32	3,607	157	437	4,201	122	331	453	4,654
<b>Cost / Cwt</b>	<b>\$ 4.27</b>	<b>\$ 1.34</b>	<b>\$ 5.62</b>	<b>\$ 4.36</b>	<b>\$ 2.95</b>	<b>\$ 0.11</b>	<b>\$ 13.04</b>	<b>\$ 0.57</b>	<b>\$ 1.58</b>	<b>\$ 15.19</b>	<b>\$ 0.44</b>	<b>\$ 1.20</b>	<b>\$ 3.22</b>	<b>\$ 16.82</b>
<b>Cost/Cow/Day</b>	<b>\$ 3.67</b>	<b>\$ 1.16</b>	<b>\$ 4.83</b>	<b>\$ 3.75</b>	<b>\$ 2.54</b>	<b>\$ 0.10</b>	<b>\$ 11.21</b>	<b>\$ 0.49</b>	<b>\$ 1.36</b>	<b>\$ 13.06</b>	<b>\$ 0.38</b>	<b>\$ 1.03</b>	<b>\$ 2.77</b>	<b>\$ 14.47</b>
<b>Cost % / Cwt</b>	<b>25.4</b>	<b>8.0</b>	<b>33.4</b>	<b>25.9</b>	<b>17.5</b>	<b>0.7</b>	<b>77.5</b>	<b>3.4</b>	<b>9.4</b>	<b>90.3</b>	<b>2.6</b>	<b>7.1</b>	<b>19.1</b>	<b>100.0</b>
<b>BE Milk/cwt</b>	21	7	27	21	14	1	64	3	8	74	2	6	16	82
<b>BE Milk/Day</b>	18	6	24	18	12	0	55	2	7	64	2	5	14	71

# Basis Information

- Basis is defined as: The cash value of milk greater than or less than the Class III settlement price
  - Producer Website
  - Multi Year Average
    - Quarterly
  - Discounting basis value

# Basis Information

	2008			2009			2010			2011			Average
	Class III	My Cash Price	Basis	Class III	My Cash Price	Basis	Class III	My Cash Price	Basis	Class III	My Cash Price	Basis	My Basis
January	\$19.32	\$ 21.53	\$ 2.21	\$10.78	\$ 12.73	\$ 1.95	\$14.50	\$ 16.00	\$ 1.50	\$13.48	\$ 16.37	\$ 2.89	\$ 2.14
February	17.03	\$ 19.24	\$ 2.21	9.31	\$ 10.77	\$ 1.46	14.28	\$ 15.50	\$ 1.22	17.00	\$ 19.42	\$ 2.42	\$ 1.83
March	18.00	\$ 19.13	\$ 1.13	10.44	\$ 11.66	\$ 1.22	12.78	\$ 13.92	\$ 1.14	19.40		\$ (19.40)	\$ 1.16
April	16.76	\$ 18.40	\$ 1.64	10.78	\$ 12.25	\$ 1.47	12.92	\$ 13.91	\$ 0.99	16.87		\$ (16.87)	\$ 1.37
May	18.18	\$ 19.13	\$ 0.95	9.84	\$ 11.47	\$ 1.63	13.38	\$ 14.69	\$ 1.31	16.52		\$ (16.52)	\$ 1.30
June	20.25	\$ 21.11	\$ 0.86	9.97	\$ 11.17	\$ 1.20	13.62	\$ 15.02	\$ 1.40	19.11		\$ (19.11)	\$ 1.15
July	18.24	\$ 19.05	\$ 0.81	9.97	\$ 11.23	\$ 1.26	13.74	\$ 15.23	\$ 1.49	21.39		\$ (21.39)	\$ 1.19
August	17.32	\$ 18.37	\$ 1.05	11.20	\$ 12.38	\$ 1.18	15.18	\$ 16.03	\$ 0.85	21.67		\$ (21.67)	\$ 1.03
September	16.28	\$ 17.60	\$ 1.32	12.11	\$ 13.29	\$ 1.18	16.26	\$ 17.53	\$ 1.27			\$ -	\$ 1.26
October	17.06	\$ 18.01	\$ 0.95	12.82	\$ 14.24	\$ 1.42	16.94	\$ 19.01	\$ 2.07			\$ -	\$ 1.48
November	15.51	\$ 17.16	\$ 1.65	14.08	\$ 15.36	\$ 1.28	15.44	\$ 17.83	\$ 2.39			\$ -	\$ 1.77
December	15.28	\$ 16.58	\$ 1.30	14.98	\$ 16.48	\$ 1.50	13.83	\$ 16.66	\$ 2.83			\$ -	\$ 1.88
							Discount	\$ -	\$ 1.54				
Average	\$17.63	\$18.78	\$1.34	\$11.36	\$12.75	\$1.40	\$14.41	\$ 14.72	\$ 1.54	\$18.18	\$17.90	(\$9.14)	\$1.46
High	\$20.25	\$21.53	\$2.21	\$14.98	\$16.48	\$1.95	\$16.94	\$19.01	\$2.83	\$21.67	\$19.42	\$2.89	
Low	\$15.51	\$16.58	\$0.81	\$9.31	\$10.77	\$1.18	\$12.78	\$0.00	\$0.85	\$13.48	\$16.37	(\$21.67)	
Range(spread)	\$ 4.74	\$ 4.95	\$ 1.40	\$ 5.67	\$ 5.71	\$ 0.77	\$ 4.16	\$ 19.01	\$ 1.98	\$ 8.19	\$ 3.05	\$ 24.56	

# Contracting Tools

- Futures
  - Monthly
  - Quarterly flat price
  - Semi Annual flat price
  - Market Orders
- Options
  - Puts
  - Calls
  - Fence
- OTC Cash Contract
  - Product contracts (Cheese, NFDM, Butter)
  - Class Price



# Business Trends

- Social Expectations
  - Food production practices
  - Food Quality (value)
- Governmental Regulations
  - Food Safety
  - Environmental Protection
- Volatility
  - Cost of Inputs
  - Global Markets
- Access to Capital
  - Liquidity
    - Working Capital
  - Solvency
    - Debt to Capital

# Business Trends

<b>Frequency of an event</b> High	<u>Operational Risk</u> Social Expectations <ul style="list-style-type: none"> <li>▪ Food Safety</li> <li>▪ Food Value</li> </ul>	<u>Financial Risk</u> Volatility <ul style="list-style-type: none"> <li>• Cost of Inputs</li> <li>• Revenues, Global Markets</li> </ul>
	<u>Strategic Risk</u> Government Regulations <ul style="list-style-type: none"> <li>▪ Food Production Practices</li> <li>▪ Environmental Protection</li> </ul>	<u>Catastrophic Risk</u> Capital Access <ul style="list-style-type: none"> <li>▪ Liquidity</li> <li>▪ Solvency</li> </ul>

Low

**Severity of an event** High

- Risk Category Mitigation
- Strategic Risk Adjust to it
  - Operational Risk Manage it
  - Financial Risk Hedge it
  - Catastrophic Risk Insure it

# Summary

- Risk is present in all business
  - Price risk is hard to stay
- Risk management requires resources
- Future business risk trends can be cataloged and approached with a management plan

# Thank You

# Questions